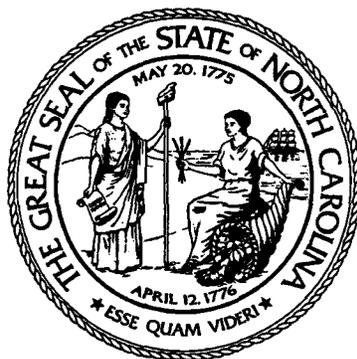


LEGISLATIVE RESEARCH COMMISSION

INFORMATION TECHNOLOGY



**REPORT TO THE
1998 SESSION OF THE
1997 GENERAL ASSEMBLY
OF NORTH CAROLINA**

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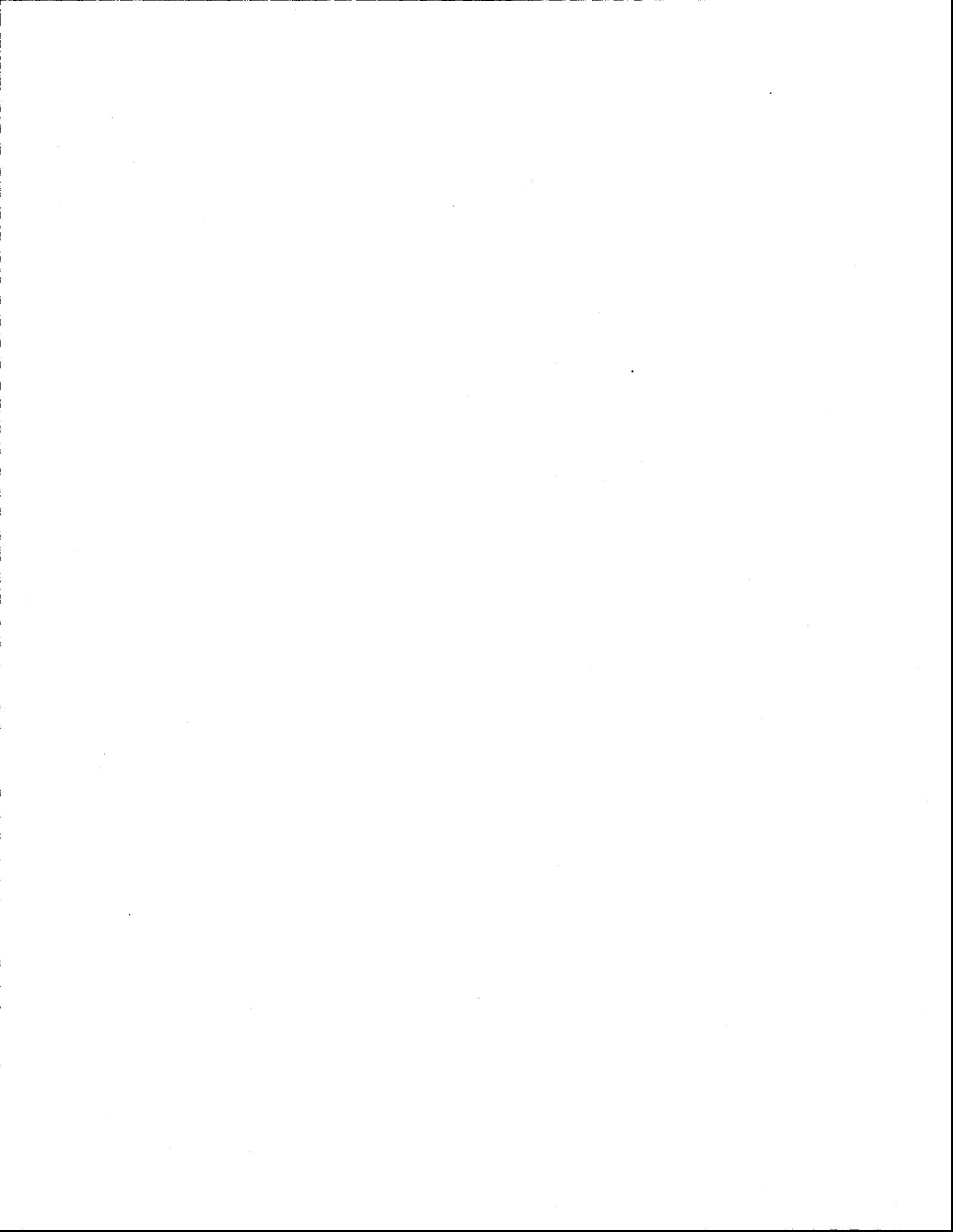
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STATE OF NORTH CAROLINA
LEGISLATIVE RESEARCH COMMISSION
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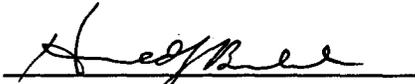


May 11, 1998

TO THE MEMBERS OF THE 1997 GENERAL ASSEMBLY (REGULAR SESSION 1998):

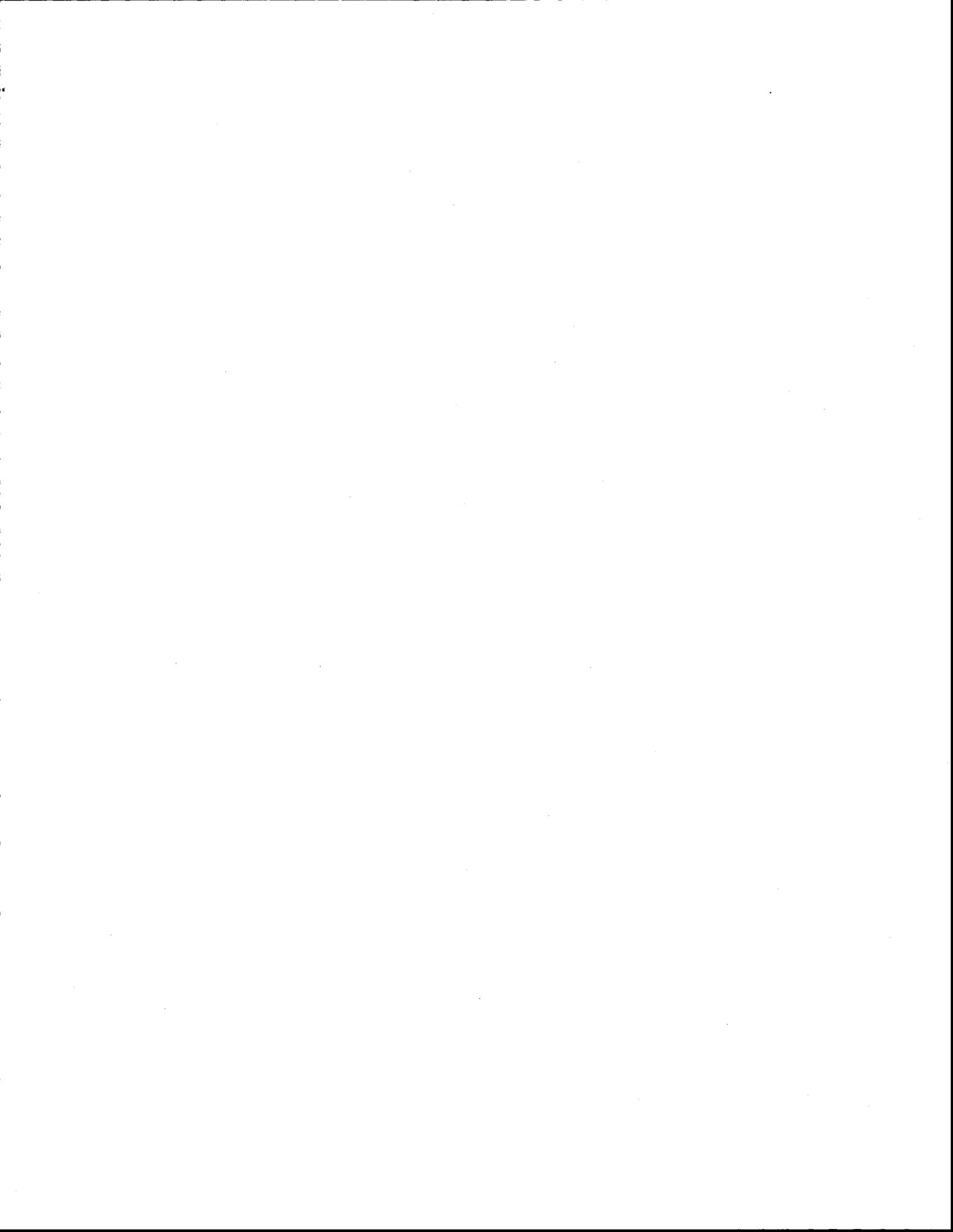
The Legislative Research Commission herewith submits to you for your consideration its interim report on information technology. The report was prepared by the Legislative Research Commission's Committee on Information Technology pursuant to G.S. 120-30.17(1).

Respectfully submitted,


Harold J. Brubaker
Speaker of the House


Marc Basnight
President Pro Tempore

Cochair
Legislative Research Commission



1997-1999

LEGISLATIVE RESEARCH COMMISSION

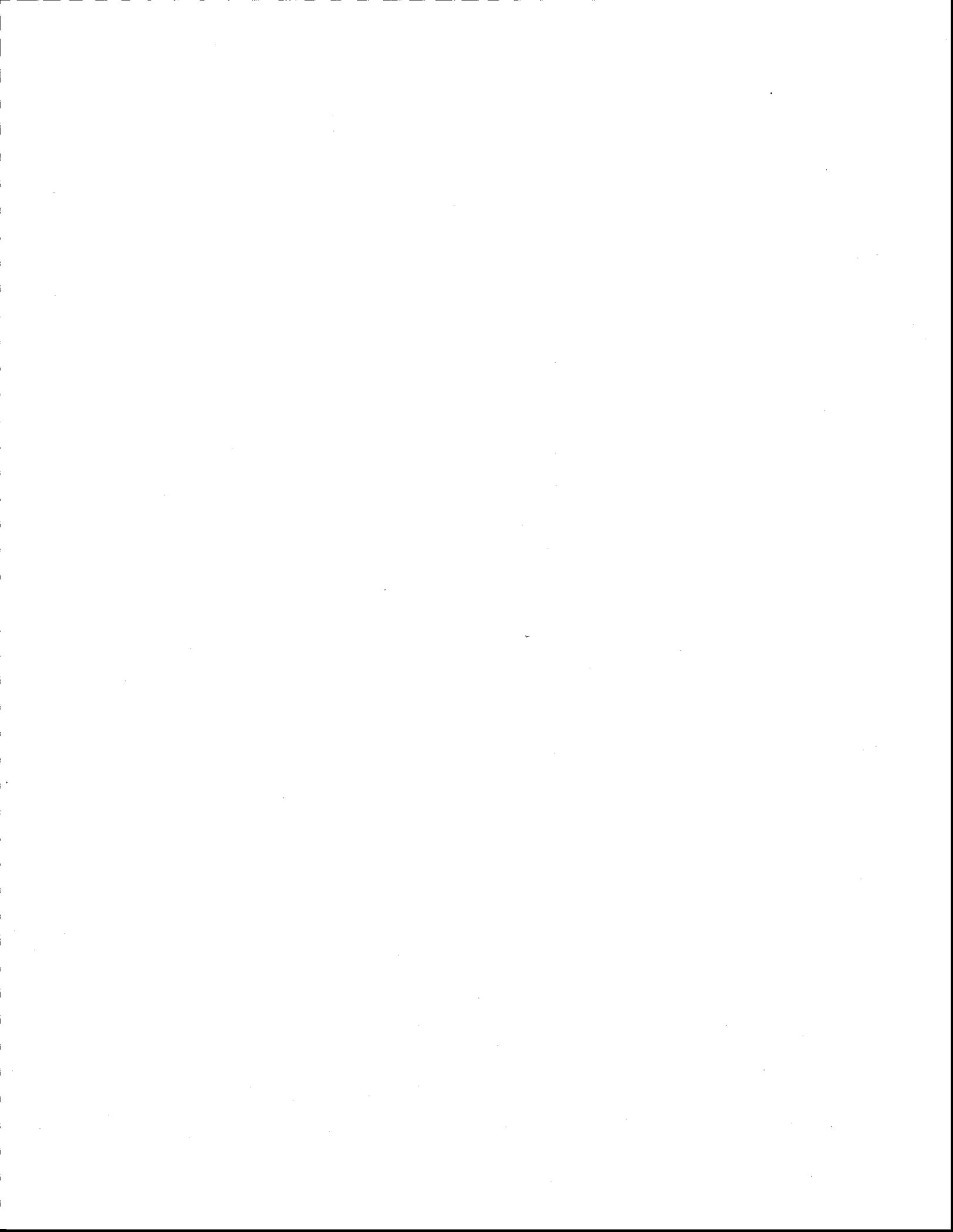
MEMBERSHIP

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Marc Basnight, Cochair

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PREFACE

The Legislative Research Commission, established by Article 6B of Chapter 120 of the General Statutes, is the general purpose study group in the Legislative Branch of State Government. The Commission is cochaired by the Speaker of the House and the President Pro Tempore of the Senate and has five additional members appointed from each house of the General Assembly. Among the Commission's duties is that of making or causing to be made, upon the direction of the General Assembly, "such studies of and investigations into governmental agencies and institutions and matters of public policy as will aid the General Assembly in performing its duties in the most efficient and effective manner" (G.S. 120-30.17(1)).

The Legislative Research Commission, prompted by actions during the 1997 Session, has undertaken studies of numerous subjects. These studies were grouped into broad categories and each member of the Commission was given responsibility for one category of study. The Cochairs of the Legislative Research Commission, under the authority of G.S. 120-30.10(b) and (c), appointed committees consisting of members of the General Assembly and the public to conduct the studies. Cochairs, one from each house of the General Assembly, were designated for each committee.

The study of Information Technology was authorized by Part II, Section 2.1 of Chapter 483 of the 1997 Session Laws. That section allows for consideration of House Bills 290, 970, 973, 1034, and 1047 in determining the nature, scope and aspects of the study. (The section also allowed for consideration of House Bill 925, but the subject of that bill was referred by the Legislative Research Commission to another committee.) The relevant portions these bills are included in Appendix A. The Legislative Research Commission authorized this study under authority of G.S. 120-30.17(1) and grouped this study in its Financial Institutions and Information Technology area under the direction of Senator Ed Warren. The Committee was chaired by Senator Bill Martin and Representative Dennis Reynolds. The full membership of the Committee is listed in Appendix B of this report. Committee minutes and all information presented to the Committee are filed in the Legislative Library and are available on the Committee's web site at <http://www.ncga.state.nc.us/itsc>.

COMMITTEE PROCEEDINGS

The Legislative Research Commission's (LRC) Information Technology (IT) Study Committee met four times to study issues relating to information technology in North Carolina. The Committee minutes are on file in the Committee notebook in the Legislative Library.

January 6, 1998

The Committee met for the first time. Sen. Warren, the LRC member to whom the IT Study Committee is assigned, welcomed members and noted the importance of the Committee. The Committee then adopted its budget.

Secretary of Commerce Norris Tolson was the first speaker. The state government's information technology services organization is within the Department of Commerce, headed by State Chief Information Officer Rick Webb, the Assistant Secretary of Commerce for Information Technology. Secretary Tolson noted that North Carolina has one of the best technology base points of any state, and that part of his department's mission is to make sure that the full value of the taxpayer investment in technology is used wisely across the state. He stated goals of trying to provide technology all across the state, not just within government; to help the business community in the area of training and communication; promoting and supporting electronic commerce; and to make better use of the monies already available to his organization as well as to improve service. Secretary Tolson invited the Committee to tour the State Information Processing Services (SIPS) facility.

The next speaker was Mr. Larry Singer of Public Interest Breakthroughs, Inc., a Vienna, Va., firm that consults with state governments on the implementation of new technologies and a frequent contributor to Government Technology magazine. Mr. Singer spoke on many of the information technology challenges facing state governments and approaches for tackling them. Topics he addressed included: lack of IT budgeting; lack of IT planning; undertaking IT projects with the focus being on the technology rather than the business problem in need of solution; problems in IT procurement; centralized IT support vs. distributed; IT human resource issues;

outsourcing; and the role of the Chief Information Officer. Mr. Singer's presentation gave the Committee a good "fifty thousand foot view" of government IT from a non-technical management perspective.

Mr. Jody Zeugner, the Legislative Analyst for Information Technology on the legislative staff, then gave a presentation on a host of issues from which the Committee may choose some to examine in detail. He explained that this list is probably too long and the issues too complex for the Committee to deal with them all, but that the Committee should at least be made aware of the existence and magnitude of the issues. He divided the issues into two sets: those that impact the economy, citizens and industry of the entire state, and those related specifically with the management and operation of information technology in and by the state government.

Specific issues that were suggested as having statewide applicability are:

- Electronic Commerce--is legislation required to authorize the use of digital signatures? If so, what should it say?
- The IT industry in the state--are there barriers to IT entrepreneurship and investment, are the state's educational institutions equipped to produce qualified IT professionals to fill the over 190,000 vacant jobs in the industry nationwide, could North Carolina do a better job of "growing its own" IT industry and personnel and keeping them here?
- The State's IT and telecommunications infrastructure: Should the state do more to ensure that technology is available throughout the state, including the rural areas?
- Resolving the Year 2000 date problem: to what extent might industry tax write-offs for Year 2000 system remediation adversely impact the state's tax revenues?

Issues involving state government are:

- The state's IT governance structure: examination of roles, relationships, functions, authority of the State's IT governing bodies and management organizations; the oversight of Judicial Branch IT; and the possibility of an IT Appropriations Subcommittee.
- Strategic IT planning--its relation to agency business planning and budgeting, the relationship between agency planning and statewide IT planning.
- Modernization of the state's technology architecture and infrastructure: is appropriated money needed to remove impediments caused by SIPS' being a fee-for-service organization?

- The state's approach to application development
- Outsourcing of IT services--what functions should be outsourced; the need for trained, skilled professionals to manage outsourced functions.
- IT procurement: the need for "best value" procurement for IT rather than the traditional approach of awarding contracts to the lowest bidders; sharing of risk with contractors; streamlined processes; the use of IT in the procurement process.
- IT personnel issues: examination of the qualifications, compensation, benefits, training, recruitment and retention of the state's IT work force.
- Data architecture: the need to design and develop our data bases in a standard manner so that data can be more easily integrated across applications and agencies.
- Consolidation of networks, computing resources, and the staffs required to operate and support them.
- Training of the state work force in general in the use of computers
- The state's Year 2000 system remediation problem
- The need for the state to deliver information and services to citizens on a real-time, on-line basis via the Internet.

Mr. Zeugner suggested that the Committee may wish to divide into two subcommittees, one to deal with the statewide IT issues and one to deal with those affecting state government. The remainder of the meeting was spent discussing IT topics that Committee members felt should be examined by the Committee, and whether the splitting into subcommittees was a good idea. It was decided that the full Committee would meet again at the next meeting.

February 10-11, 1998

On February 10 members of the Committee attended the monthly meeting of the Information Resources Management Commission (IRMC), the governing body of IT in the Executive Branch of state government, and took a tour of the State Information Processing Services (SIPS) facility.

On February 11 the IT Study Committee met. Mr. Rick Webb, Assistant Secretary of Commerce for Information Technology and the state's Chief Information Officer, gave a presentation on "Governing Information Technology in North Carolina," along with members of his staff: Ms. Emilie Schmidt, State Technology Officer; Mr. Tom Runkle, State Technology Planning Officer; Mr. Dennis McCarty, Director, SIPS; and Mr. Jim Broadwell, Director of SIPS/State Telecommunications Services. Mr. Webb discussed some of the factors that make North Carolina a national leader in state IT; that IT is critically important for the state; and some of the cultural, infrastructural, organizational, and fiscal barriers that must be overcome in order for North Carolina to exploit IT to its fullest. Ms. Schmidt discussed the state's Technical Architecture, the "blueprint" that provides a shared vision for IT across the state and a framework for decision making. Mr. Runkle presented material on the state's IT Quality Assurance, training, and strategic planning programs. Mr. McCarty and Mr. Broadwell gave presentations on the operational functions of SIPS and its State Telecommunications organization. SIPS provides services to state and local agencies relative to the state's computing and telecommunication infrastructure.

The presentation by the Department of Commerce IT staff was interrupted briefly for comments by Dr. Bill Willis, Vice Provost for Information Technology at North Carolina State University and an outgoing member of the IRM Commission. Dr. Willis addressed the importance of the IRMC and complimented it for its leadership. He added that it is important for the IT Study Committee and the legislature in general to pay attention to the IRMC and its activities. He mentioned two areas of concern: that the state needs to hire, train, and retain personnel to develop IT plans and strategies and to manage projects, and should hire contractors to do the actual work, rather than the current situation which in many cases is the opposite; and that the state should reconsider the way it funds IT projects. Rather than treat all projects as vertical initiatives that must be funded independently from the ground up, we should pool large sums of those dollars to horizontally and centrally fund the state's fundamental IT infrastructure and the training and support that it requires, and then individually fund projects that exploit that infrastructure.

After breaking for lunch the Committee next heard from Ms. Debra Jones, the state's Year 2000 Program Manager from within the Department of Commerce. Ms. Jones said that the cost to reconfigure North Carolina's systems to become "Year 2000 compliant" (that is, to use four-digit years in systems' internal code so that the

two-digit "00" that indicates 2000 will not be incorrectly interpreted as 1900) is estimated at \$132 million. This figure includes internal staffing costs and takes into consideration lost productivity and the contingency for using external resources. It does not, however, include assets with "imbedded processors" such as elevators, traffic lights, etc., and also excludes desktop computers not in compliance. The funding will come from a \$36 million Year 2000 fund that has already been allocated, any federal funds that might be available, and agency funds they might already have in their budgets. There will still be a shortfall of an as yet undetermined amount which the General Assembly may be requested to fund in the 1998 short session; Ms. Jones office is in the process of determining that figure. Ms. Jones described the organization and process the state is using to allocate Year 2000 remediation funds to requesting agencies and the types and status of activities that are under way. She fielded several questions from Committee members.

The Committee concluded by discussing topics it might consider in the future. Suggested topics included: digital signature; IT procurement; some of the governance issues raised by Dr. Willis; telecommuting; technology in the state's educational system; and funding of IT research and development. The Committee decided to continue meeting as a full committee rather than break into subcommittees at this time

March 10, 1998

The IT Study Committee met for the third time on March 10, 1998. The topics for this meeting were procurement of information technology and electronic signature.

Mr. Jody Zeugner, the legislative staff's IT analyst, gave a presentation on IT procurement. He stated that IT requires its own special set of procurement rules, given its complexity, volatility, mission criticality, and extremely high cost. Governments at all levels are implementing procurement reform to make acquisition more efficient and yield better products, typically consisting of improved procurement planning, better use of technology in the procurement process, simplified processes, use of "best value" procurement principles, establishment of long-term partnerships between government and vendors, and solicitations that describe the business problem in need of solution rather than lay out detailed technical specifications. He described "best value" procurement as having vendors selected not based solely on lowest bid, but a subjective evaluation of

proposals' technical merit and life cycle cost and vendors' past performance. This subjectivity introduces a degree of risk that government procurement officials have not traditionally been willing to take. Mr. Zeugner pointed out that once the contract is awarded, the process has only begun; post-award project management and contract administration require trained, skilled professionals.

The next speaker was Mr. John Leaston, Director of the Department of Administration's Division of Purchase and Contract (P&C). He told the Committee that last year the state purchased in excess of \$3 billion worth of goods and services. Mr. Leaston discussed how P&C is using technology in its work, with a web page that provides information on term contracts and bids. Beginning January 1, P&C started posting bid solicitations electronically and plans to develop the capability to receive bids electronically in the future.

Mr. Leaston then addressed the various procurement methods employed by P&C: request for information, request for quotation, invitation for bid, and request for proposal. The request for proposal is a document used to obtain IT procurements, because it provides the flexibility to allow consideration of factors not possible in the invitation to bid process. The RFP method can be a one-step procurement where a vendor's price and technical information are requested in the same document, or a two-step procurement where technical and cost information are provided in separate documents. This allows P&C to form an objective opinion on the best technical approach. Contracts can be awarded on the basis of lowest cost, best analyzed value, and best combination of cost and technical factors. Mr. Leaston said P&C is currently exploring and implementing rules to adopt new methods of soliciting procurements and developing proposals, including "best value", partnering, and competitive negotiations. He stated they agreed they need to employ more "best value" in the purchase of IT and need to look at partnering as a basis for doing some procurements, and also that competitive negotiations will help in eliminating some of the rigidities now found in the current process. When asked if he felt there needed to be legislation in order to truly award on the basis of "best value" and feel the state is protected in the event of a challenge to an award, Mr. Leaston stated his belief that "best value" is supported by existing legislation and can be implemented through the rules process, but that if there is a need for state government to employ "best value" on a broader basis, perhaps legislation could be adopted to set a standard.

The Committee next heard from Mr. Mike Boone, Director of Planning for the Department of Révenue, who is currently involved in a partnership contract for information technology services with IBM. DOR worked closely with P&C in soliciting and awarding this contract, which P&C considers a model for other agencies to emulate.

The next speaker was Mr. Richard Wolfe, Director of the General Services Administration's "Trail Boss" program. Trail Boss is a program which provides intense and thorough training to government procurement officials on all phases of the procurement process, from requirements definition through solicitation development, proposal evaluation, protest avoidance, and post-award contract administration and project management. The program has traditionally been intended for representatives of U.S. Federal government agencies, but recently has been attended by officials of the Canadian government, and is available to state and local agencies as well.

After lunch the topic shifted to electronic and digital signatures. The Committee watched a video produced by the Washington State Department of Information Services, explaining their digital signature program and the technology it employs. Mr. Zeugner then gave a presentation on the different approaches various states and the Federal government have taken with regard to digital signature legislation. State legislation can generally be grouped into one of four categories:

- The Utah approach—very prescriptive and technology specific. Utah requires digital signatures to be created and recognized using a technology called "public key infrastructure." Includes language that sets forth detailed provisions regarding the rights and duties of certification authorities and subscribers, allocation of liability, and evidentiary presumptions.
- The California approach—sets forth criteria which must be satisfied in order for an electronic signature to be considered valid. Silent on technology employed, certification authority responsibilities, liability, evidentiary issues; typically requires a state agency to address those through administrative rulemaking procedures.
- The Massachusetts approach—even less specific than California. Simply states that a signature may not be deemed invalid simply based on the fact that it was generated and submitted electronically. Lets existing law with regard to written signatures, fraud, etc. govern electronic signatures as well.

- The Illinois approach—a hybrid of the previous three. Has a section like Massachusetts', but gives heightened recognition and protection to signatures that meet California-like criteria. For entities that use public key technology, specifies some of the certification authority, liability and evidentiary issues.

The Committee was next addressed by The Secretary of State, the Honorable Elaine Marshall, who is chairman of a new Electronic Commerce Workgroup reporting to the Information Resources Management Commission (IRMC). Sec. Marshall commented on the importance of the Internet and electronic commerce to North Carolina in its efforts to drastically improve service to its citizens. On the specific topic of digital signature legislation and regulation, she stated that the Secretary of State's office, being the regulatory mechanism for signature authentication on important commercial and government paper documents, has expertise with both the methods of avoiding fraudulent signatures and the harmful consequences for forged documents, and has a departmental culture centered around respecting and preserving signature based-records; that in many states the responsibility for promoting and regulating digital signature certification authorities is statutorily placed with the Secretary of State, and that her office is prepared and willing to accept such a role if the legislature so chooses; and that there is a need for some digital signature legislation in the General Assembly's May session.

Sen. Reeves had distributed a draft bill based on the California model, and he stated his belief that the Secretary of State should be enabled to deal with the digital signature model. Rep. Reynolds had spoken in favor of the Massachusetts approach, but agreed that both are technology neutral and would support rules that can change more quickly than can legislation as new technologies evolve.

The Committee concluded its meeting with a discussion of its planned activities prior to the beginning of the 1998 legislative session. It was agreed that the only specific recommended legislation the Committee would have time to develop would be with respect to IT procurement and digital signature, and that IT governance and other issues would be dealt with in the fall of 1998.

April 8, 1998

The IT Study Committee's fourth meeting was held on April 8. The Committee first discussed a draft bill titled "An Act to Facilitate Electronic Commerce With and By Public Entities of the State of North Carolina By

Recognizing the Validity of Electronic Signatures and Authorizing the Secretary of State to Regulate Electronic Signatures and Certification Authorities." Members reviewed and discussed the text of an original draft bill, and a version of that draft that incorporated revisions recommended by the Office of the Secretary of State. The Committee voted unanimously to approve the draft with the Office of the Secretary of State's revisions for inclusion in the Committee's interim report. The effect of this legislation would be to afford an electronic signature the same force and effect as a manual signature in transactions to which public entities of North Carolina are party, provided the signature meets the following criteria: it is unique to the person using it; it is capable of verification; it is under the sole control of the person using it; it is linked to data in such a manner that if the data are changed, the electronic signature is invalidated; and it conforms to rules promulgated by the Secretary of State. The legislation would permit the Office of the Secretary of State to promulgate rules to administer the use of electronic signatures, including the creation, accreditation, licensing, operation, regulation, and sanctioning of certification authorities.

A presentation then was given by Dr. Jie Wang, Associate Professor of Computer Science at the University of North Carolina at Greensboro, on security issues related to business transactions conducted over the Internet and the World Wide Web. He described several techniques that criminals can fairly easily employ to acquire people's personal information, such as address, phone number, mother's maiden name, social security number, bank card or credit card numbers and associated PIN numbers, and membership numbers for private web sites, often without the person even knowing that this information has been compromised. He explained that the use of digital signatures by means of public key cryptography when transacting business over the Internet is an effective means of preventing this type of information theft. In using digital signatures, however, it is imperative that the user memorize his or her private key and never disclose it to anyone else.

Next the Committee considered a draft bill titled "An Act To Provide For 'Best Value' Information Technology Procurements." This bill would require the consideration of "best value" in the evaluation of proposals in information technology acquisitions. Evaluation based on "Best Value" means to select the proposal representing the best tradeoff between price and performance, where quality is considered an integral performance factor. The award decision is made based on multiple factors, including: total cost of ownership, meaning the

cost of acquiring, operating, maintaining and supporting a product or service over its projected lifetime; the evaluated technical merit of the vendor's proposal; the vendor's past performance; and the evaluated probability of performing the requirements stated in the solicitation on time, with high quality, and in a manner that accomplishes the stated business objective(s). The bill also would require the Department of Administration's Division of Purchase and Contracts (P&C) and the Department of Commerce's Information Technology Services organization under the direction of the States' Chief Information Officer to develop and implement an approach for training Agency and P&C officials involved in information technology procurement in all aspects of best value IT contracting, from requirements determination through post-award contract administration and project management. Mr. John Leaston, Director of the Division of Purchase and Contracts, expressed support for the bill. The Committee voted unanimously to recommend the draft legislation to the LRC and the 1998 session of the General Assembly.

The Committee spent the remainder of the meeting discussing other items to include in this report and the logistics for the next meeting. It was decided that the Committee would meet via conference call to discuss the draft report.

April 21, 1998

The Committee held a conference call to discuss the draft interim report. Two additions to the report were agreed upon: a recommendation that the General Assembly explore methods to provide to accelerate development, deployment, and support of new applications to support the important area of Electronic Commerce; and, because the standard "Unlimited Liability" clause included in State IT contracts is considered too restrictive and is a disincentive to many vendors to bid, that the clause be removed and an alternative means of allocating liability be developed. With these additions the draft report was approved for submission to the LRC.

FINDINGS AND RECOMMENDATIONS

The range of topics from which the Information Technology Study Committee could choose specific issues to examine is very broad, and many of the individual issues are very complex. During the four meetings held during the 1997-98 interim, the Committee merely scratched the surface of the complete scope of the state's information technology--its importance to the operation of state government, the ability of government to deliver information and services to citizens, and the impact of technology and the IT industry to the economy of the state. To grapple with the management issues involved in the state's governance of IT alone could require several meetings. The Committee did spend half of one meeting on this topic, and between that session and staff research it is clear that there are many governance issues worthy of further examination; however, it decided that there was not sufficient time to do so prior to the 1998 short session, and that more extensive work must wait until the 1998-99 interim.

The Committee concentrated on two issues with respect to proposed new legislation: electronic signature and the state's procurement of information technology. However, it recognized that there are several other specific issues that it should deal with in the Fall.

Electronic Signature

RECOMMENDATION: The General Assembly should enact the bill providing for electronic signatures to be recognized as valid in transactions to which public entities of the State of North Carolina are party, and authorizing the Secretary of State to regulate electronic signatures and certification authorities.

The Committee finds that it is becoming increasingly important for the State to be able to conduct business with industry and citizens electronically. With the recent explosion of the Internet into the mainstream of American business and culture, "Electronic Commerce" has become a high priority not only for industry but for state government as well. Citizens are beginning to demand the same instantaneous, on-demand access to information and services from government that it is able to receive from thousands of commercial businesses via the World Wide Web. In order to do business electronically, it is imperative that the transacting parties have

confidence in each other's identity and that the electronic messages they exchange are secure and arrive unaltered. Several technical approaches have been developed to solve this problem, and with these technologies it is now possible to affix to an electronic message an "electronic signature" which the receiving party can be confident is valid. As many as 40 states have introduced legislation that would, in one form or another, afford electronic signatures the same legal force and effect as written ones. The Committee finds that it is necessary for North Carolina to pass such legislation so that legal authority would exist for the State to engage in electronic commerce. Rather than specify particular technical solutions which may be employed or set forth in law provisions regarding liability allocation, evidentiary presumptions, consumer protection, and duties of the parties involved in the creation and use of electronic signatures, the Committee recommends that those details be left to existing law and rules to be developed by the Secretary of State. The Committee recognizes that some states have passed legislation that would address electronic signatures in transactions between two private parties; however it recommends that North Carolina's first effort at electronic signature legislation be limited to transactions to which public entities are party. If industry expresses desire for further legislation dealing with private-to-private transactions, that can be dealt with in the future.

RECOMMENDATION: That the General Assembly explore ways to provide resources for development of Electronic Commerce applications to be developed by and for State Agencies.

The Committee finds that in order to exploit Electronic Commerce, the State will be required to develop many computer applications. These applications will be developed and supported by multiple Agencies, ideally based on a common technical architecture and using a set of standard tools and methodologies. The committee recommends that the General Assembly explore methods to provide resources to State Agencies, or to the central Information Technology Services organization within the Department of Commerce, in order to accelerate development, deployment, and support of new applications to support the important area of Electronic Commerce.

Information Technology Procurement

RECOMMENDATION: The General Assembly should enact the bill providing for “Best Value”

Information Technology Procurements.

The Committee finds that information technology is more complex, more volatile, and often considerably more expensive than most commodities purchased by the State, and therefore should be acquired differently. In many cases State agencies seek a technology solution to a business problem, but are unsure of exactly what that technology solution might be. In such cases it is not appropriate to use the traditional means of selecting contractors, whereby the requirement is expressed in terms of detailed technical specifications and the lowest bid which meets those specifications receives the award. It is more appropriate to evaluate vendors' proposals and select a contractor on the basis of “best value”, meaning the best tradeoff between price and performance, where quality is considered an integral performance factor. The award decision is made based on multiple factors, including: total cost of ownership, meaning the cost of acquiring, operating, maintaining and supporting a product or service over its projected lifetime; the evaluated technical merit of the vendor's proposal; the vendor's past performance; and the evaluated probability of performing the requirements stated in the solicitation on time, with high quality, and in a manner that accomplishes the stated business objective(s). The “Best Value” procurement technique provides the State the greatest likelihood of achieving the highest possible ratio of benefit to overall cost over the entire life of the IT asset or project.

The Committee finds that “Best Value” evaluations are not prohibited by existing statute, but neither are they explicitly called for in complex acquisitions such as information technology; and that, despite the fact that “Best Value” procurement is permitted under law, the technique it is often not employed in situations where it should be. Furthermore, the Committee finds that there is very little expertise in conducting “Best Value” procurement within state government; the procurement officials, particularly in the acquiring agencies, involved in identifying requirements, developing solicitations and evaluation criteria, evaluating proposals, selecting vendors for award, avoiding protests, administering the resulting contracts, and managing complex IT projects have not received sufficient training in all these areas. The Committee therefore recommends enactment of legislation to explicitly require the use of “Best Value” practices in the acquisition of information technology, and the

development and implementation of training approaches to ensure that government officials are capable of truly receiving the best value in their IT procurements.

RECOMMENDATION: That the requirement for an “Unlimited Liability” clause in State contracts for information technology resources be removed, and an alternative approach be developed to allocate liability between contractors and the State for such contracts.

The Committee finds that the State’s contracts for information technology resources contain standard language establishing unlimited liability on the part of the contractor. The Committee further finds that this clause is excessive and causes some qualified vendors to choose not to bid on State IT contracts. The Committee recognizes the need to protect the State’s interest, but believes that the current clause is too restrictive. The Committee recommends that the requirement that this clause be included in IT contracts be removed, and that an alternative means of allocating liability be explored and developed.

Other Issues the Committee Intends to Examine

The Committee recognizes that there are many other State IT issues which require its attention, but which it was unable to study in sufficient detail prior to the 1998 session. The Committee plans to address as many of these as possible when it reconvenes during the 1998-99 interim.

Governance of Information Technology in North Carolina State Government. The Committee and its staff have identified several issues involving the overall governance of IT in State government that it plans to examine in further detail. The Committee would like to learn more about the various IT oversight and management structures and the interrelationships between State Agencies and among the three branches of government to determine whether recommendations for change are in order. Topics the Committee intends to consider include:

- The structure, authority and focus of the Information Resources Management Commission;
- The effectiveness of the state’s information technology planning and budgeting processes;

- The nature of the relationships between and among Agencies, the IRMC, the State Information Processing Services organization, and the state's IT planning and policy staff;
- The committee structure of the General Assembly as pertains to oversight of information technology;
- Governance of IT in the Judicial Branch of Government, and the relationship of the Judicial Branch's IT to State's overall technology architecture, infrastructure, and management structure;
- The methods by which strategic statewide IT initiatives, technology assessment, and "research and development" are funded, and the ways newly approved technologies are funded for incorporation into the state's IT infrastructure.
- The relative roles of the Agencies and the State's central Information Resource Management organization in providing expertise, resources and leadership with respect to application development and IT procurement.

The Condition of the State's IT Work Force. Another very critical issue is the status of the State's IT work force, including compensation, benefits, training, and the ability to attract and retain qualified professionals. Industry analysts estimate that well over 200,000 IT jobs are vacant; this labor shortage is particularly ominous to the State, which many consider to offer noncompetitive salary and benefit packages and poor training programs for IT professionals, and which must compete with the high-tech companies of neighboring Research Triangle Park for IT talent. The Committee plans to work with Agency officials and the Office of State Personnel to study this problem and seek recommendations for improvement.

A related issue requiring the Committee's consideration is the types of functions State agencies have their in-house IT work forces perform vis-à-vis those that they contract for. The Committee has been advised that State agencies often hire contractors to develop IT strategies and manage major projects and use their in-house State employee staffs to perform non-managerial tasks such as programming and system administration. This situation represents the opposite of the desired condition; ideally the State would use its work force for planning and management functions and thus would develop and retain institutional knowledge at a high organizational level, and outsourcing would be used to acquire current state-of-the-art expertise in the required technical areas. The Committee would like to determine the validity of this assertion and, if it is true, what should be done to improve the situation.

Consolidation of IT Resources and Support. North Carolina years ago realized major cost savings with the consolidation of multiple mainframe computing centers and telecommunications networks, which were combined under State Information Processing Services (SIPS). In recent years, however, Agencies have become increasingly dependent not only on centralized mainframe computing but also on desktop computers and local area networks (LANs) installed not only in Raleigh but also distributed throughout the state. These LANs must be interconnected statewide, adding to the size and complexity of the state's wide area network (WAN). These platforms support types of applications that were not previously possible, yielding great benefits, but are very support intensive and have not experienced the kind of resource and support consolidation that their mainframe counterparts enjoyed. A tremendous amount of duplication exists as agencies independently administer very similar local and wide area network technologies in all 100 North Carolina counties. The IT Study Committee hopes to inspect this problem in more detail and make recommendations that will lead to increased economies of scale and cost savings without loss of agencies' autonomy or ability to perform their missions.

Technology in the public schools. Many Committee members are or have been public education professionals and have a keen interest in the application of technology in North Carolina's schools. The state's school systems are heavily dependent upon state funding to purchase and implement instructional technology. A state technology plan was formulated in 1995 that required every school system to have in place a written and approved technology plan designed to improve instruction and increase student learning via the use of computers and other technologies. In accordance with the state plan, school systems wrote their plans with the understanding that they would receive a certain level of funding from the state. In that first school year, 1995-96, \$42 million was allocated to the school technology fund, and school systems made dramatic strides toward enacting their instructional technology goals. Funding for the second year (1996-97) was originally projected to be \$72 million, but only \$20 million was appropriated. In the third year (1997-98) \$30 million was appropriated, so that the three-year total now stands at \$92 million—a figure which has been inadequate to fully fund the technology plans of North Carolina school systems. The IT Study Committee hopes to examine the status of technology implementation in the K-12 schools, including Internet connectivity and other infrastructural and associated support issues, and ascertain the one-time and recurring funding required to satisfy currently unfunded

requirements. In doing so the Committee will consider its role relative to that of the School Technology Commission, which has four legislative members including Rep. Reynolds, the Committee's Cochair.

Other issues. In addition to these issues, various Committee members have expressed interest in other IT topics such as telecommuting, technology transfer, and the effectiveness of the State's secondary and post-secondary educational institutions in preparing North Carolina citizens for careers in IT. The Committee would like to look at these topics in the Fall, subject to time available.

APPENDIX A

CHAPTER 483
1997 Session Laws

AN ACT TO AUTHORIZE STUDIES BY THE LEGISLATIVE RESEARCH COMMISSION, TO CREATE AND CONTINUE VARIOUS COMMISSIONS, TO CONTINUE A COUNCIL, TO DIRECT STATE AGENCIES AND LEGISLATIVE OVERSIGHT COMMITTEES AND COMMISSIONS TO STUDY SPECIFIED ISSUES, AND TO IMPOSE A MORATORIUM ON SERVICE CORPORATION CONVERSIONS.

The General Assembly of North Carolina enacts:

PART I.-----TITLE

Section 1. This act shall be known as "The Studies Act of 1997".

PART II.-----LEGISLATIVE RESEARCH COMMISSION

Section 2.1. The Legislative Research Commission may study the topics listed below. When applicable, the bill or resolution that originally proposed the issue or study and the name of the sponsor is listed. Unless otherwise specified, the listed bill or resolution refers to the measure introduced in the 1997 Regular Session of the 1997 General Assembly. The Commission may consider the original bill or resolution in determining the nature, scope, and aspects of the study.

...

(24) Information technology (H.B. 290, 925, 970, 973, 1034, 1047)

...

PART XVII.-----EFFECTIVE DATE AND APPLICABILITY

Section 17.1. Except as otherwise specifically provided, this act becomes effective July 1, 1997. If a study is authorized both in this act and the Current Operations Appropriations Act of 1997, the study shall be implemented in accordance with the Current Operations Appropriations Act of 1997 as ratified.

In the General Assembly read three times and ratified this the 28th day of August, 1997.

s/ Marc Basnight
 President Pro Tempore of the Senate

s/ Harold J. Brubaker
 Speaker of the House of Representatives

s/ James B. Hunt, Jr.
 Governor

Approved 11:00 a.m. this 10th day of September, 1997

**GENERAL ASSEMBLY OF NORTH CAROLINA
1997 SESSION**

**HOUSE BILL 290
(in part)**

AN ACT TO ESTABLISH THE LEGISLATIVE STUDY COMMISSION ON ELECTRONIC COMMERCE.

.....

"§ 120-213. Creation and purpose of the Legislative Study Commission on Electronic Commerce.

The Legislative Study Commission on Electronic Commerce is established. The commission shall Determine the best means of developing electronic commerce in the State.

"§ 120-214. Commission duties; reports.

- (a) The Legislative Study Commission on Electronic Commerce shall examine the development of electronic commerce in the State and evaluate the feasibility and desirability of authorizing the use of digital signatures and establishing strict sanctions and penalties regarding computer-related crimes as a means to facilitate the development of electronic commerce. In its study, the commission shall:
- (1) Review digital legislation, policies, and procedures of other states.
 - (2) Evaluate the current technological infrastructure of State government and information systems use and needs in State government and determine potential demands for additional information staff, equipment, software, data communications, and consulting services in State government during the next 10 years.
 - (3) Determine whether digital signature legislation will facilitate the development of electronic commerce in the State and, if so, assist the General Assembly in determining whether or not it is in the public interest to:
 - a. Regulate the practices of certification authorities by requiring certification authorities licensed to do business in the State to be licensed, certified, or registered, and by regulating their practices.
 - b. Regulate the use of digital signatures in the public and private sectors.
 - c. Prescribe the powers and duties of certain State and local agencies and officials.
 - d. Establish penalties, remedies, and presumptions to provide for collection on certain guarantees.
 - e. Provide reliance limits and liability.
 - f. Maintain a publicly accessible database containing a certification authority disclosure record for each licensed, certified, or registered certification authority.
 - (4) Study means to minimize the incidence of forged digital signatures and fraud in electronic commerce.
 - (5) Conduct any other studies or evaluations the commission considers necessary to effectuate its purpose

.....

**GENERAL ASSEMBLY OF NORTH CAROLINA
1997 SESSION**

**HOUSE BILL 970
(in part)**

**AN ACT TO PROVIDE A POSITIVE ENVIRONMENT FOR ECONOMIC DEVELOPMENT BY
DECLARING A MORATORIUM ON TAXATION OF INTERNET SERVICES FOR AT LEAST TWO MORE
YEARS.**

.....

Section 1. It is the intent of the General Assembly that no sales taxes or similar taxes or fees on Internet services and Internet service providers shall be enacted for at least two more years.

Section 2. This act becomes effective October 1, 1997, and expires October 1, 1999.

**GENERAL ASSEMBLY OF NORTH CAROLINA
1997 SESSION**

HOUSE BILL 973

AN ACT DIRECTING THE DIVISION OF MOTOR VEHICLES OF THE DEPARTMENT OF TRANSPORTATION TO CONDUCT A PILOT PROGRAM THAT ALLOWS NEW MOTOR VEHICLE DEALERS TO ISSUE REGISTRATION PLATES AND TITLES FOR NEW MOTOR VEHICLES SOLD BY THEM.

Section 1. Program Established. -- The Division of Motor Vehicles of the Department of Transportation shall implement a pilot program that allows new motor vehicle dealers to issue certificates of title, registration plates, or both for new motor vehicles sold by them. The program shall begin January 1, 1998, and continue until January 1, 1999, or a later date set by the Division.

Section 2. Selection of Dealers. -- The Division shall determine the requirements a new motor vehicle dealer must meet to participate in the program. The Division shall select dealers to participate in the program on the basis of these requirements and on the ability of the dealers selected to provide a thorough test of the program. In selecting automobile dealers to participate, the Division shall consider the recommendations of the North Carolina Automobile Dealers Association.

The Division shall determine the number of dealers to be included in the program and shall include as many as is feasible. The Division may implement the program in phases so that the number of participating dealers is increased as the Division gains experience with the program and resolves any problems that arise with the program.

Section 3. Implementation. -- The Division shall implement the program by allowing the participating dealers to submit an application for a certificate of title, a vehicle registration, or both to the Division electronically and to receive authorization electronically to issue a title or registration plate. The electronic submission of an application may be made by the dealer directly to the Division or indirectly through a third-party vendor that submits the application directly to the Division.

Notwithstanding G.S. 20-63(h), the Division shall provide participating dealers with registration plates to issue under the program and may allow participating dealers to issue certificates of title under the program. A dealer may not issue a personalized or other special registration plate under the program.

The Division may enter into contracts to implement this program. If the Division implements the program by using a third-party vendor, any charges by the vendor for its services shall be billed to and paid by the participating dealers through per-transaction charges to the dealers or another method.

Section 4. Progress Report. -- The Division shall submit a written report to the Joint Legislative Transportation Oversight Committee by December 1, 1997, on its plan to implement the pilot program required by this act. The report shall describe the program and the Division's goals for the program.

Section 5. Final Report. -- The Division shall submit a written report to the Joint Legislative Transportation Oversight Committee by December 1, 1998. The report shall include an evaluation by the Division of the success or failure of the program and a recommendation on whether the program should end on January 1, 1999, or should continue beyond that date. The report shall include data on the number of dealers participating in the program, the number of vehicle titles and registration plates issued by month by participating dealers under the program, the effect of the program on the workload of the Division, and any effect the program has had on contract tag agents of the Division.

Section 6. There is appropriated from the Highway Fund to the Division of Motor Vehicles of the Department of Transportation the sum of twenty-five thousand dollars (\$25,000) for the 1997-98 fiscal year and the same amount for the 1998-99 fiscal year to implement the pilot program authorized by this act.

Section 7. Section 6 of this act becomes effective July 1, 1997. The remaining sections of this act are effective when they become law.

**GENERAL ASSEMBLY OF NORTH CAROLINA
1997 SESSION**

HOUSE BILL 1034

**AN ACT CONCERNING RESTRUCTURING OF THE INFORMATION RESOURCE MANAGEMENT
COMMISSION.**

Section 1. This act restructures the Information Resource Management Commission.

Section 2. This act is effective when it becomes law.

GENERAL ASSEMBLY OF NORTH CAROLINA
1997 SESSION

HOUSE BILL 1047
(in part)

AN ACT TO ESTABLISH THE LEGISLATIVE STUDY COMMISSION ON INFORMATION TECHNOLOGY.

Section 1. Chapter 120 of the General Statutes is amended by adding a new Article to read:

"ARTICLE 25.

"The Legislative Study Commission on Information Technology.

"§ 120-213. Creation and purpose of the Legislative Study Commission on Information Technology.

The Legislative Study Commission on Information Technology is established. The commission shall review current information technology that impacts public policy, including electronic data processing and telecommunications, software technology, and information processing. The goals and objectives of the commission shall be to develop electronic commerce in the State and to coordinate the use of information technology by State agencies in a manner that assures that the citizens of the State receive quality services from all State agencies and that the needs of the citizens are met in an efficient and effective manner.

"§ 120-214. Commission duties; reports.

(a) The Legislative Study Commission on Information Technology may:

(1) Evaluate the current technological infrastructure of State government and information systems use and needs in State government and determine potential demands for additional information staff, equipment, software, data communications, and consulting services in State government during the next 10 years. The evaluation may include an assessment of ways technological infrastructure and information systems use may be leveraged to improve State efficiency and services to the citizens of the State, including an enterprise-wide infrastructure and data architecture.

(2) Evaluate information technology governance, policy and management practices, including policies and practices related to personnel and acquisition issues, on both a statewide and project level.

(3) Evaluate the feasibility and desirability of authorizing the use of digital signatures to facilitate the development of electronic commerce. The evaluation may include a review of digital legislation, policies, and procedures of other states. The commission may assist the General Assembly in determining whether or not it is in the public interest to:

a. Regulate the practices of certification authorities by requiring certification authorities licensed to do business in the State to be licensed, certified, or registered and by regulating their practices.

b. Regulate the use of digital signatures in the public and private sectors.

c. Prescribe the powers and duties of certain State and local agencies and officials.

d. Establish penalties, remedies, and presumptions to provide for collection on certain guarantees.

e. Provide reliance limits and liability.

f. Maintain a publicly accessible database containing a certification authority disclosure record for each licensed, certified, or registered certification authority.

(4) Study means to minimize the incidence of forged digital signatures and fraud in electronic commerce and the need for establishing strict sanctions and penalties regarding computer-related crimes.

(5) Conduct any other studies or evaluations the commission considers necessary to effectuate its purpose.

(b) The commission may consult with the Information Resource Management Commission on statewide technology strategies and initiatives and review all legislative proposals and other recommendations of the Information Resource Management Commission.

(c) The commission shall report by March 1 of each year to the Appropriations Committees of the Senate and the House of Representatives concerning the commission's activities and findings and any recommendations for statutory changes.

.....

APPENDIX B

**INFORMATION TECHNOLOGY STUDY COMMITTEE
MEMBERSHIP
1997-98**

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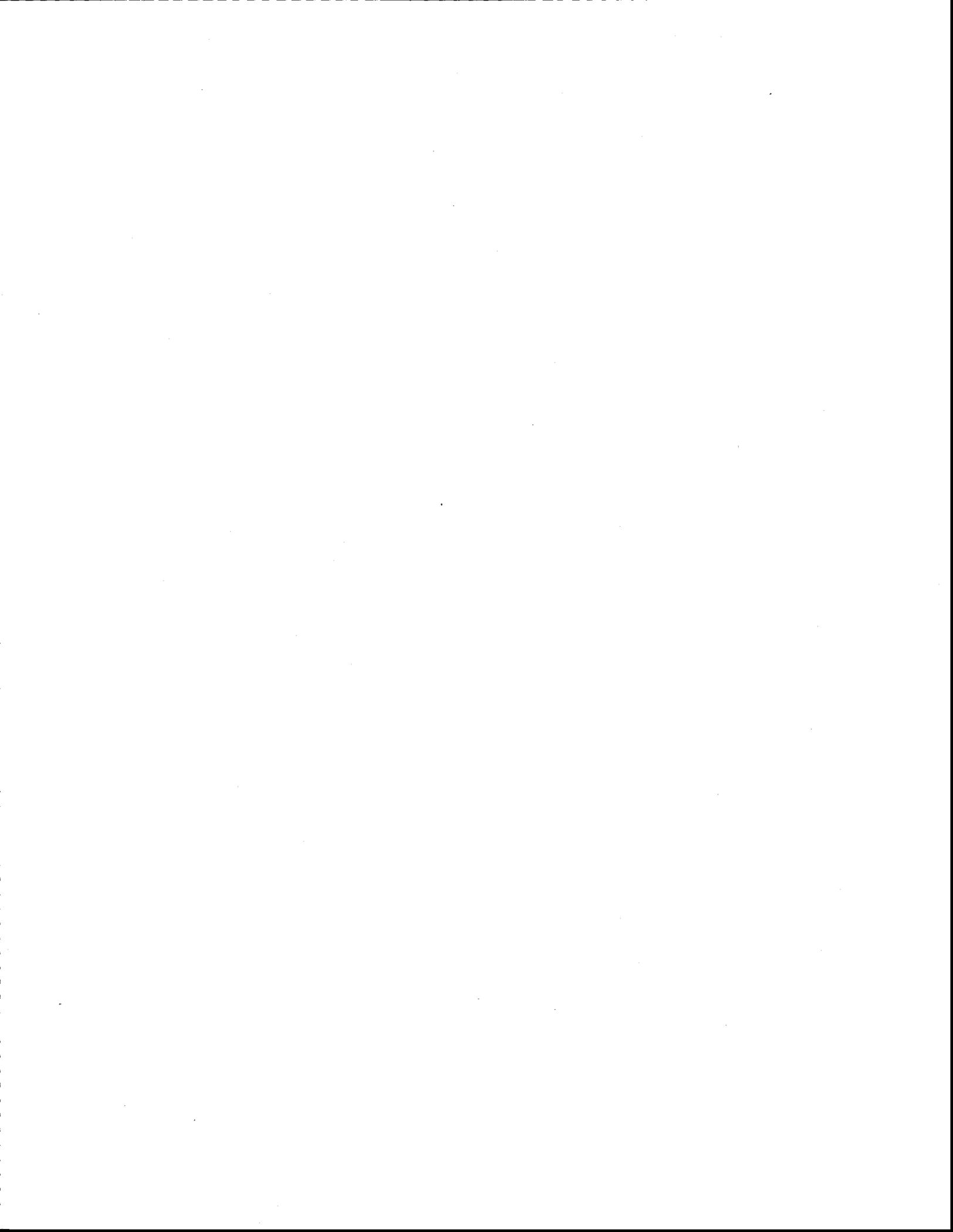
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APPENDIX C

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1997

D

98-RVZ-002A
THIS IS A DRAFT 15-APR-98 10:41:31

Short Title: Electronic Commerce Act.

(Public)

Sponsors:

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT TO FACILITATE ELECTRONIC COMMERCE WITH AND BY PUBLIC
3 ENTITIES OF THE STATE OF NORTH CAROLINA BY RECOGNIZING THE
4 VALIDITY OF ELECTRONIC SIGNATURES AND BY AUTHORIZING THE
5 SECRETARY OF STATE TO REGULATE ELECTRONIC SIGNATURES AND
6 CERTIFICATION AUTHORITIES.
7 The General Assembly of North Carolina enacts:
8 Section 1. Chapter 66 of the General Statutes is
9 amended by adding a new Article to read:
10 "ARTICLE 11A.
11 "Electronic Commerce in Government.
12
13 "§66-58.1 Title; Purpose.
14 (a) This Article shall be known and may be cited as the
15 Electronic Commerce Act. The purpose of this Article is to
16 facilitate electronic commerce with and by public entities of the
17 State by recognizing the validity of electronic signatures, and
18 by providing for the regulation of electronic signatures and
19 certification authorities.
20 (b) Notwithstanding any other provision of law, this Article
21 shall apply to records generated, stored, processed,

1 communicated, or used for any purpose by or with public entities
2 of the State. 'Public entities' as used in this Article shall
3 include but not be limited to State agencies, boards, commissions
4 or institutions and local political subdivisions including
5 cities, counties, school districts or public services districts.

6 "§66-58.2 Definitions.

7 The following definitions apply in this Article:

8 (1) 'Certification authority' means a person authorized
9 by the Secretary of State to facilitate electronic
10 commerce by vouching for the connection between a
11 person and that person's electronic signature.

12 (2) 'Electronic Signature' means any identifier or
13 authentication technique attached to or logically
14 associated with an electronic record which is
15 intended by the by the party using it to have the
16 same force and effect as the party's manual
17 signature.

18 "§66-58.3 Validity of Electronic Signatures.

19 (a) When a public entity of the State is a party to a
20 contract, transaction or filing, an electronic signature in such
21 contract, transaction or filing is a valid signature for all
22 purposes under North Carolina law, so long as the entity
23 requesting or requiring the signature accepts electronic
24 signatures as a form of signature.

25 (b) An electronic signature shall have the same force and
26 effect as a manual signature if and only if the electronic
27 signature embodies all of the following attributes:

28 (1) It is unique to the person using it;

29 (2) It is capable of certification;

30 (3) It is under sole control of the person using it;

31 (4) It is linked to data in such a manner that if the
32 data are changed, the electronic signature is
33 invalidated; and

34 (5) It conforms to rules adopted by the Secretary of
35 State pursuant to this Article.

36 (c) All public entities of the State of North Carolina may
37 accept electronic signatures.

38 (d) A contract between public and private entities is not
39 unenforceable, nor is it inadmissible into evidence, on the sole

1 ground that the contract is evidenced by an electronic record or
2 that it has been signed with an electronic signature.

3 "§66-58.4 Rulemaking.

4 (a) The Secretary of State may promulgate rules under this
5 Article. Such rules may include, but are not limited to:

- 6 (1) Definitions, including but not limited to more
7 technical definitions of 'certification authority'
8 and 'electronic signature';
9 (2) The creation, accreditation, licensing, operation,
10 regulation, and sanctioning of certification
11 authorities;
12 (3) The imposition of licensing and renewal fees in
13 amounts reasonably related to the cost of
14 administering this Article;
15 (4) The imposition of civil monetary penalties for
16 noncompliance with this Article or the rules
17 promulgated thereunder.

18 (b) For purposes of administering this Article, the Secretary
19 of State may at all times promulgate and amend rules under this
20 Article using the procedure for adoption of temporary rules under
21 G.S. 150B-21.1. Such rules shall be deemed to meet the criteria
22 for adoption of temporary rules under G.S. 150B-21.1.

23 "§66-58.5 Enforcement; penalty for violation.

24 (a) The Secretary of State may investigate complaints or other
25 information indicating violations of rules adopted by the
26 Secretary of State under this Article or otherwise indicating
27 fraudulent or unlawful conduct in violation of this Article.

28 (b) The Secretary of State may assess a civil penalty of not
29 more than one hundred thousand dollars (\$100,000) against any
30 person who violates a provision of this Article or any rule
31 promulgated thereunder. In determining the amount of a penalty
32 under this subsection, the Secretary of State shall give due
33 consideration to each of the following factors:

- 34 (1) the organizational size of the person cited;
35 (2) the good faith of the person cited;
36 (3) the gravity of the violation;
37 (4) the prior record of the violator in complying or
38 failing to comply with this Article or a rule
39 adopted pursuant to this Article; and

1 (5) the risk of harm to the public or to individuals
2 caused by the violation.

3 Civil penalties imposed by the Secretary of State under this
4 subsection shall be deposited in the General Fund. Chapter 150B
5 governs the imposition of a civil penalty under this subsection.
6 A civil penalty owed under this subsection may be recovered in a
7 civil action brought by the Secretary of State or the Attorney
8 General.

9 "§66-58.6 Restraint of violation; legal representation; rights
10 under other law.

11 (a) The General Court of Justice has jurisdiction and
12 authority upon application of the Secretary of State to enjoin or
13 restrain violations of this Article.

14 (b) It shall be the duty of the Attorney General of North
15 Carolina, when requested, to represent the Secretary of State in
16 actions or proceedings in connection with this Article.

17 (c) Nothing in this Article shall adversely affect any rights
18 or the enforcement of any rights acquired by any person under any
19 other statute or at common law with respect to matters also
20 covered by this Article.

21 "§66-58.7 Exemptions.

22 Electronic signatures specifically authorized and employed
23 pursuant to other provisions of the General Statutes are exempt
24 from this Article."

25 Section 2. The Secretary of State shall adopt initial
26 rules pursuant to this Act not later than October 30, 1998. In
27 developing these rules, the Secretary of State shall incorporate
28 any national standards for ensuring the integrity of electronic
29 signatures and shall seek the advice of public and private
30 entities, including but not limited to the Information Resource
31 Management Commission and the North Carolina Department of
32 Administration. Before adoption of the rules, the Secretary of
33 State shall hold at least one public hearing to receive comments.

34 Section 3. This act is effective when it becomes law.

SUMMARY OF PROPOSED ELECTRONIC SIGNATURE LEGISLATION

This proposal does the following:

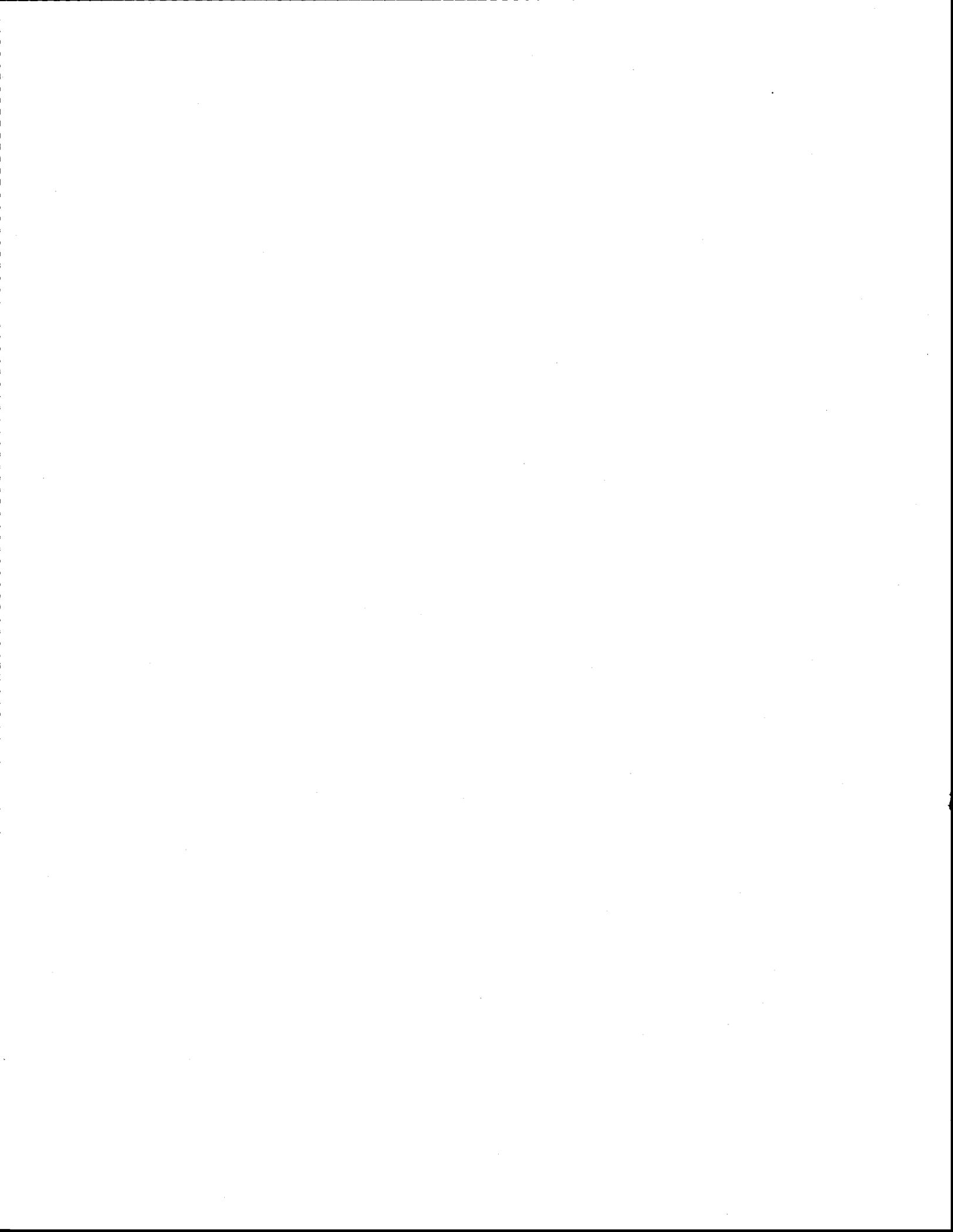
Section 1: Inserts language in Chapter 66 of the General Statutes that applies to contracts, transactions or filings to which a public entity of the State of North Carolina is a party. That language states that an "electronic signature," that is, an identifier or authentication technique associated with an electronic record which is intended to have the same force and effect as a manual signature, shall have the same force and effect provided it meets the following criteria:

- It is unique to the person using it;
- It is capable of certification;
- It is under the sole control of the person using it;
- It is linked to data in such a manner that if the data are changed, the electronic signature is invalidated; and
- It conforms to rules adopted by the Secretary of State.

This section also permits the Secretary of State to develop rules pertaining to the creation, accreditation, licensing, operation, regulation, and sanctioning of "certification authorities," the entities authorized to vouch for the connection between a person and that person's electronic signature.

Section 2: The Secretary of State shall adopt initial rules no later than October 30, 1998.

Section 3: The act is effective when it becomes law.



APPENDIX D

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1997

D

98d-RVZ-001
THIS IS A DRAFT 15-APR-98 10:41:48

Short Title: Best Value Info. Tech. Procurements. (Public)

Sponsors:

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT AN ACT TO PROVIDE FOR "BEST VALUE" INFORMATION TECHNOLOGY
3 PROCUREMENTS.
4 The General Assembly of North Carolina enacts:
5 Section 1. Chapter 143 of the General Statutes is
6 amended by adding a new section to read:
7 "\$143-135.9. 'Best Value' information technology procurements.
8 (a) For purposes of this section:
9 (1) 'Information technology' includes electronic data
10 processing and telecommunications goods and
11 services, microelectronics, software, information
12 processing, office systems, any services related to
13 the foregoing, and consulting or other services for
14 design and/or redesign of business processes.
15 (2) 'Best Value' procurement means the selection of a
16 contractor based on a determination of which
17 proposal offers the best tradeoff between price and
18 performance, where quality is considered an
19 integral performance factor. The award decision is
20 made based on multiple factors, including: total

1 cost of ownership, meaning the cost of acquiring,
2 operating, maintaining and supporting a product or
3 service over its projected lifetime; the evaluated
4 technical merit of the vendors proposal; the
5 vendor's past performance; and the evaluated
6 probability of performing the requirements stated
7 in the solicitation on time, with high quality, and
8 in a manner that accomplishes the stated business
9 objective(s).

10 (3) 'Solution Based Solicitation' means a
11 solicitation in which the requirements are stated
12 in terms of how the product or service being
13 purchased should accomplish the business
14 objective(s), rather than in terms of the technical
15 design of the product or service.

16 (4) 'Government-Vendor Partnersip' means a mutually
17 beneficial contractual relationship between State
18 government and a contractor, wherein the two share
19 risk and reward, and value is added to the
20 procurement of complex technology.

21 (b) The intent of Best Value Information Technology procurement
22 is to enable contractors to offer and the agency to select the
23 most appropriate technology to meet the business objectives
24 defined in the solicitation and to keep all parties focused on
25 the desired outcome of a procurement. Business process re-
26 engineering, system design, and technology implementation may be
27 combined into a single solicitation.

28 (c) The acquisition of information technology by the State of
29 North Carolina shall be conducted using the Best Value
30 procurement method. For acquisitions which the procuring Agency
31 and the Division of Purchase and Contracts deem to be highly
32 complex or determine that the optimal technical solution to the
33 business problem at hand is not known, the use of Solution Based
34 Solicitation and Government-Vendor Partnership is authorized and
35 encouraged.

36 Section 2. The Division of Purchase and Contracts shall
37 develop and implement no later than December 31, 1998 policies
38 and procedures to ensure the use of Best Value Procurement and,
39 as applicable, Solution Based Procurement and Government-Vendor

1 Partnerships in the procurement of information technology by
2 State agencies.

3 Section 3. The Division of Purchase and Contracts and
4 the Department of Commerce/Information Technology Services shall
5 jointly develop and implement no later than December 31, 1998
6 policies, procedures and/or programs to ensure that Agency and
7 Division of Purchase and Contracts personnel involved in the
8 development of solicitations, development of specifications,
9 evaluation of proposals, selection of vendors, administration of
10 contracts, and management of information technology projects
11 receive high-quality training in the principles of Best Value
12 procurement, Solution Based Procurement, Government-Vendor
13 Partnerships, contract administration, and project management.

14 Section 4. Division of Purchase and Contract and the
15 Department of Commerce/Information Technology Services shall
16 report to the House Technology Committee and the Senate XXXXX
17 Committee on the results of the implementation of G.S. 143-135.9
18 at its first meeting during the 1999 Regular Session of the
19 General Assembly.

20 Section 5. Section 1 of this act becomes effective July
21 1, 1998. The remaining sections of this act are effective when
22 they become law.

**SUMMARY OF PROPOSED BEST VALUE INFORMATION TECHNOLOGY PROCUREMENT
LEGISLATION**

This proposal does the following:

Section 1: Inserts language in Chapter 143 of the General Statutes that defines "Best Value" procurement as the selection of a contractor based on a determination of which proposal offers the best tradeoff between price and performance, where quality is considered an integral performance factor, and where the award decision is made based on multiple factors, including: total cost of ownership, meaning the cost of acquiring, operating, maintaining and supporting a product or service over its projected lifetime; the evaluated technical merit of the vendor's proposal; the vendor's past performance; and the evaluated probability of performing the requirements stated in the solicitation on time, with high quality, and in a manner that accomplishes the stated business objective(s). Section 1 states that the acquisition of information technology by the State shall be conducted using the "best value" procurement method.

Section 2: Requires the Department of Administration's Division of Purchase and Contracts to develop and implement by December 31, 1998 policies and procedures to ensure the use of "Best Value" procurement practices in the acquisition of information technology by State agencies.

Section 3: Requires the Division of Purchase and Contracts and the Department of Commerce's Information Technology Services organization to jointly develop and implement by December 31, 1998 policies, procedures and programs to ensure that Agency personnel involved in information technology procurement and project management receive high-quality training in "Best Value" procurement, contract administration, and project management principles.

Section 4: Requires the Division of Purchase and Contracts and the Information Technology Services organization to report the results of implementation of this act to the 1999 session of the General Assembly.

Section 5: Section 1 becomes effective July 1, 1998. The remaining sections are effective when they become law.

